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Attorney Docket No. 82987/KNM
Customer No. 01333

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Dennis E. Smith, et al

Title: IMPROVED VOIDED ARTICLES

Serial No. 10/033,457

Filed 27 December 2001

Group Art Unit: 1772

Examiner: Walter Aughenbaugh

I hereby certify that this correspondence is being deposited today with the United States Postal Service as first class mail in an envelope addressed to Commissioner For Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Carol A. Kukurudza

November 4, 2003
Date

Commissioner for Patents
P.O. Box 1450
Alexandria, VA. 22313-1450

Sir:

DECLARATION UNDER RULE 35 U.S.C. §132

The undersigned, Dennis E. Smith, declares that:

I received a Bachelor of Science Degree in Chemical Engineering in 1969 from the City College of the City University of New York (CCNY) and a Master of Business Administration in 1978 from Rochester Institute of Technology;

I have been employed by Eastman Kodak Company since 1969 as a Process Development Chemical Engineer, and since 1980 I have been engaged in the preparation of polymeric particles for use in imaging systems including traditional silver halide photographic systems, thermally processable imaging systems, thermal dye transfer systems, and inkjet printer systems;

I am an inventor in the above captioned patent application;

I have been intimately involved in the preparation and prosecution of the above-captioned application, and have carefully reviewed the Office Action dated August 4, 2003, together with the Maier et al. reference (U.S. Patent 5,275,854). Maier et al. teaches shaped articles comprising a continuous oriented thermoplastic polymer having dispersed therein microbeads of a cross-linked polymer. However, the teachings of Maier et al. do not suggest selection of monomers to provide

microbeads which comprise less than 10 wt% styrenic monomer (such as divinylbenzene) and which also are thermally stable.

Further, none of the examples in Maier et al. meet both of the above mentioned requirements, that is, having less than 10 wt% styrenic monomer and being thermally stable. Except for Examples 16, 18, 24 and 26, each of which comprise 5 wt% styrenic monomer (specifically 95 wt% methyl methacrylate and 5 wt% divinylbenzene), the examples of Maier et al. use microbeads which comprise more than 10 wt% styrenic monomers. However, microbeads made from 95 wt% methyl methacrylate and 5 wt% divinylbenzene do not meet the requirement of a 2% weight loss temperature above 270°C, as demonstrated in the table below.

Linear monomer		Crosslink monomer		2% loss temp
Name	amt	Name	amt	Target ≥270°C
	wt%		wt%	°C
Methyl methacrylate	70%	Divinylbenzene	30%	300
Methyl methacrylate	90%	Divinylbenzene	10%	260
Methyl methacrylate	95%	Divinylbenzene	5%	<260

The above table shows the 2% temperature loss for methyl methacrylate crosslinked with different amounts of divinylbenzene. The thermal stability data for 30% and 10% divinylbenzene crosslink monomer was measured on the same samples used to measure the yellowness as shown in Table 1 of the subject patent application, page 20. As can be seen from the above table, decreasing the amount of crosslink monomer from 30% to 10% decreases the thermal stability of the sample. The thermal stability for a 5% crosslink monomer, per the examples of Maier, has not been measured. However, as shown in Table 6 of the subject patent application, pages 23-24, thermal stability decreases with decreasing crosslink monomer. This information, in combination with the results shown for the 30% and 10% crosslink monomer in the above table, indicates the same trend holds true for methacrylic, acrylic or styrenic crosslink monomers. Further decreasing the amount of crosslink monomer to 5% therefore will further decrease thermal stability, and the 2% loss temperature for 95 wt% methyl methacrylate and 5 wt% divinylbenzene will be less than 260°C.

As demonstrated herein, although Maier et al. discloses various monomer combinations, the disclosure of Maier et al. does not suggest a combination of

monomers, or a means to select monomers, to provide microbeads which comprise less than 10 wt% styrenic monomer and which are thermally stable, experiencing a 2% weight loss at a temperature above 270°C.

The undersigned declares further that all statements made herein of the undersigned's own knowledge are true and all statements made on information and belief are believed to be true. These statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code and such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Dennis E. Smith

Date: 11/3/03